



**[4910-13-P]**

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2017-0713; Product Identifier 2016-NM-199-AD; Amendment 39-19170; AD 2018-02-17]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are superseding Airworthiness Directive (AD) 2012-12-12 and AD 2013-16-26, which applied to all Airbus Model A330-200, A330-200 Freighter, A330-300, A340-200, and A340-300 series airplanes. AD 2012-12-12 required repetitive inspections of the outer skin rivets of the cargo doors, repair if necessary, and other repetitive inspections. AD 2013-16-26 required repetitive inspections of certain cargo doors, and repair if necessary. This new AD continues to require repetitive inspections, and repair if necessary. This new AD revises the applicability; adds a one-time inspection and adjustment of certain hook gaps; reinforcement of the door frame structure; related investigative and corrective actions if necessary; and a modification, which allows deferring reinforcement of the cargo door structure. This AD was prompted by a determination that a new inspection procedure is necessary to address the unsafe

condition. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 45 80; email: airworthiness.A330-A340@airbus.com; Internet: <http://www.airbus.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0713.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0713; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey

Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2012-12-12, Amendment 39-17092 (77 FR 37797, June 25, 2012) (“AD 2012-12-12”); and AD 2013-16-26, Amendment 39-17564 (78 FR 53640, August 30, 2013) (“AD 2013-16-26”). AD 2012-12-12 and AD 2013-16-26 applied to all Airbus Model A330-200 series airplanes, Model A330-200 Freighter series airplanes, Model A330-300 series airplanes, Model A340-200 series airplanes, and Model A340-300 series airplanes. The NPRM published in the Federal Register on August 10, 2017 (82 FR 37360). The NPRM was prompted by a determination that a new inspection procedure is necessary to address the unsafe condition. The NPRM proposed to continue to require repetitive inspections, and repair if necessary. The NPRM also proposed to add a one-time inspection and adjustment of certain hook gaps; reinforcement of the door frame structure; related investigative and corrective actions if necessary; and a modification, which would allow deferring reinforcement of the cargo door structure. We are issuing this AD to detect and correct cracked or ruptured cargo door frames, which could result in reduced structural integrity of the forward or aft cargo door.

The European Aviation Safety Agency (EASA), which is the Technical Agent for

the Member States of the European Union, has issued EASA AD 2016-0188, dated September 21, 2016; corrected September 22, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”); to correct an unsafe condition for certain Airbus Model A330-200 and -300 series airplanes; Model A330-200 Freighter series airplanes; and Model A340-200, -300, -500, and -600 series airplanes.

The MCAI states:

Several cases of cracked forward (FWD) and aft (AFT) cargo door frames, as well as loose, lost, or sheared rivets, have been reported by operators. Investigation showed that these findings are due to the low margins with respect to fatigue requirements for the AFT/FWD cargo door internal structure. Further analysis determined that the cargo door hook adjustment is a contributing factor to this issue. In case of a cracked or ruptured (FWD or AFT) cargo door frame, the loads will be transferred to the remaining structural elements. However, the secondary load path is able to sustain those loads only for a limited number of flight cycles (FC).

This condition, if not detected and corrected, could lead to rupture of adjacent vertical frames and consequent reduced structural integrity of the FWD or AFT cargo door, possibly resulting in a cargo door failure, decompression of the aeroplane and injury to occupants.

To initially address this potential unsafe condition, Airbus issued Service Bulletin (SB) A330-52-3043 and SB A340-52-4053 and, consequently, DGAC [Direction Générale de l’Aviation Civile] France issued AD 2001-124(B) and AD 2001-126(B), requiring a special detailed inspection of A330 and A340 AFT cargo doors. Since those [DGAC] ADs were issued, prompted by new occurrences, Airbus issued Alert Operators Transmission (AOT) A330-52A3085, AOT A340-52A4092, AOT A330-52A3084, AOT A340-52A4091, AOT A330-A52L003-12, AOT 340-A52L004-12, AOT A330-A52L001-12 and AOT A340-A52L002-12, providing instructions to inspect the affected areas of both

FWD and AFT cargo doors.

Consequently, EASA issued AD 2011-0007 (later revised) [which corresponds to FAA AD 2012-12-12], and AD 2012-0274 [which corresponds to FAA AD 2013-16-26], to require repetitive detailed visual inspections of AFT and FWD cargo doors at specific frames and outer skin at all frame fork ends. Since these EASA ADs were issued, Airbus published SB A330-52-3087, SB A330-52-3095, SB A340-52-4095, SB A340-52-4101, SB A340-52-5020 and SB A340-52-5023, which took over the instructions of the above mentioned AOTs, and introduced revised thresholds and intervals. In addition, the inspection program was expanded to A340-500/-600 aeroplanes. Taking into account experience from inspections accomplished in accordance with the applicable Airbus SBs at original issue (listed above), Airbus issued Revision 01 of these SBs.

Consequently, EASA issued AD 2015-0192, which superseded EASA AD 2011-0007R1 and EASA AD 2012-0274, to require for each FWD and AFT cargo door, a one-time inspection / adjustment of the hook gaps “U” and “V”, repetitive detailed inspections (DET) of all frame fork areas, frame head areas and outer skin areas to detect cracks or loose / sheared / missing fasteners, and, depending on findings, accomplishment of applicable corrective action(s). In addition, EASA AD 2015-0192 expanded the Applicability to Airbus A340-500/-600 aeroplanes.

Since EASA AD 2015-0192 was issued, Airbus published Revision 02 of the inspection SBs, introducing high-frequency eddy-current inspection method for the frame forks structure. Airbus also determined that the interval for these repetitive inspections could be increased. In addition, Airbus released some modifications (mod) introducing reinforcements to the cargo door structure improving the fatigue characteristics. These modifications and associated SBs constitute terminating action for the required repetitive inspections. Furthermore, Airbus also published other SBs, introducing cold working after oversizing of the fastener holes as a means for structural reinforcement. Accomplishment of these SBs allows postponement of the required Point of Embodiment

(Structural Modification Point) for the structural reinforcement modification SBs which terminate the repetitive inspection requirement.

For the reasons described above, this [EASA] AD partially retains the requirements of EASA AD 2015-0192, which is superseded, and requires for each FWD and AFT cargo door initial and repetitive special detailed inspections (SDI) of all frame fork areas and detailed inspections (DET) of frame head areas and outer skin areas, and a one-time inspection / adjustment of the hook gaps “U” and “V” and, depending on findings, the accomplishment of applicable corrective action(s). Additionally, this [EASA] AD requires reinforcement of the cargo door frame structure, while accomplishment of a cold working modification allows to defer the reinforcement of the cargo door structure.

It should be noted that additional inspections exist for the cargo doors, as specified in Airbus A330 ALS [Airworthiness Limitation Section] Part 2 task 523211-02-01 and task 523211-02-02, and in Airbus A340 ALS Part 2 Task 523211-02-01.

This [EASA] AD is re-published to correct typographical errors when referencing Airbus SB A340-52-4118.

Related investigative actions include detailed inspections and high frequency non-destructive test inspections. Corrective actions include reaming holes, bushing holes, replacing affected parts, and repairing cracks. Additional work includes a one-time inspection of the “U” and “V” hook gaps, and, if necessary, an adjustment of the hook gaps.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0713.

## **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

### **Request to Allow Alternative Fastener**

American Airlines (AAL) asked that we allow use of an alternative fastener when doing repairs of the cargo doors. AAL stated that paragraph (l) of the proposed AD allows credit for aft cargo doors inspected in accordance with Airbus Service Bulletin A330-52-3095, Revision 01, dated July 28, 2014. AAL noted that this service information could not be accomplished due to the non-availability of fasteners having part number "ANSA2657" that are necessary to repair findings in the door beam 1 and 4 areas of the aft cargo door. AAL added that, as a result of this parts issue, Airbus provided Technical Advisory (TA) Reference 80016786/003/2014, Issue 03, for all affected A330 operators, which allows using an alternative HST11 series fastener; Airbus also issued Operators Information Transmission SBIT-15-0085, dated October 9, 2015, to identify this substitution and AALs compliance paperwork was written with this deviation added. AAL asked that this deviation to Airbus Service Bulletin A330-52-3095, Revision 01, dated July 28, 2014, be acceptable for compliance with the proposed AD.

We agree with the commenter's request for the reasons provided. However, AAL transposed the part number in their comment, the correct part number is ASNA2657. We have added paragraph (s)(5) to this AD to include this exception.

### **Request to Revise Terminating Action Requirements**

Delta Airlines (DAL) asked that the terminating actions specified in paragraphs (j), (n), and (o) of the proposed AD be revised. DAL stated that the actions in those paragraphs specify that doing the modification constitutes terminating action for the repetitive inspections. DAL noted that this implies that an operator must do the initial inspection prior to or concurrently with the initial requirements; and if the modification is done prior to the repetitive requirements that action would not comply with the requirements. DAL added that the terminating action should be for both the initial and repetitive inspections.

We agree with the commenter's request because the intent of the terminating modification is to terminate all inspections. Although the EASA AD also specifies that the terminating action is for repetitive inspections, EASA confirmed that it applies to all inspections. Therefore, we have revised paragraphs (j), (n), and (o) of this AD to include the initial inspection as terminated actions.

### **Request to Include a No-Reporting Provision**

DAL asked that a paragraph that specifically addresses that there are no reporting requirements for the inspections be included in the proposed AD. DAL stated that there are reporting instructions within the "RC" (Required for Compliance) Accomplishment Instructions in Airbus Service Bulletin A330-52-3087, Revision 02, including Appendix 01, dated February 18, 2016; and Airbus Service Bulletin A330-52-3095, Revision 02, including Appendices 01 and 02, dated February 19, 2016. DAL noted that operators must request an alternative method of compliance if they deviate from an RC task, so a



no-reporting paragraph in the proposed AD would clarify that reporting would not be required by the proposed AD.

We agree with the commenter's request because the terminating action will eliminate the unsafe condition, so reporting areas of difficulty during accomplishment of the required inspections is not necessary. We have added paragraph (r) to this AD to include a no-reporting requirement, and re-redesignated subsequent paragraphs accordingly.

### **Request to Revise Heading**

Delta requested that we revise the heading for paragraph (m) of the proposed AD by removing "For Pre-modified airplanes." Delta stated that paragraph (m) specifies it pertains to the modification of pre-modified airplanes. Paragraph (n) of the proposed AD specifies that accomplishing (m)(1) or (m)(3) serves as terminating action for pre-modified airplanes. However, for post-modified airplanes, paragraph (o) of the proposed AD states that paragraphs (m)(1)(i) thru (m)(1)(vi) of the proposed AD serve as terminating action – therefore, paragraph (m) serves as terminating for both pre- and modified airplanes. Delta therefore requested that we revise the heading to remove "for pre-modified airplanes"

We agree to clarify the heading to paragraph (m) of this AD. We acknowledge that the actions for the modification accomplished by the service information in paragraph (m)(1)(i) through (m)(1)(iv) of this AD are terminating actions to the inspections required by paragraph (l)(1) and (l)(2) of this AD when accomplished on a pre- or post-modified airplane. However, the actions for the modification accomplished

by the service information in paragraph (m)(1)(i) through (m)(1)(iv) of this AD are optional for post-modified airplanes, whereas, these actions are required for pre-modified airplanes. Furthermore, the requirements of paragraph (m)(2) and (m)(3) of this AD are not applicable to post-modified airplanes. For these reasons, the heading of paragraph (m) of this AD is stated as “Modification for Pre-Modification Airplanes.” We have not changed this AD in this regard.

### **Request to Specify Modification Locations**

DAL asked that the word “aft” be included in the header for paragraph (k) of the proposed AD. DAL stated that this would clarify that the actions in that paragraph apply only to the aft cargo door modification. DAL added that it would also align with the headers for paragraphs (k) and (l) of the proposed AD.

DAL also asked that the word “aft” be added to the first sentence in paragraph (n) of the proposed AD. DAL stated that this would clarify that the actions in that paragraph apply only to pre-modified aft cargo doors.

In addition, DAL asked that the header for paragraph (n) of the proposed AD be revised from “Aft Cargo Door Terminating Action” to include “pre-modified airplanes” in the header. DAL stated that this would clarify that the requirements in that paragraph apply only to pre-modified aft cargo doors.

We agree with the commenter’s requests to include the word “aft” in the header for paragraph (k) and the first sentence of paragraph (n) of this AD for the reasons provided. We have included the word “aft” in the subject language for clarification.

We agree to change the header for paragraph (n) of this AD. That header for that paragraph merely gives information about the content of the paragraph. We have changed the header for paragraph (n) of this AD accordingly.

#### **Request to Provide Credit for Certain Actions**

AAL asked that paragraphs (h)(2) and (l)(2) of the proposed AD be revised to provide credit for previously accomplishing the check of the forward and aft cargo door hook gaps, in accordance with Airbus Service Bulletin A330-52-3087, Revision 01, dated July 9, 2014; or Airbus Service Bulletin A330-52-3095, Revision 01, dated July 28, 2014. AAL stated that it accomplished the check in accordance with the referenced service information.

We agree with the commenter's request. However, paragraphs (s)(2) and (s)(4) of this AD already provide the requested credit. Therefore, we have not changed this AD in this regard.

#### **Conclusion**

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously, and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

#### **Related Service Information under 1 CFR part 51**

Airbus has issued the following service information.

The following service information describes procedures for inspecting and repairing the frame fork area at beam 4 and frame head area at beam 1 from frame 20B to frame 25 of the forward cargo door, and adjusting the hook gaps “U” and “V.” This service information is distinct since it applies to different airplane models.

- Service Bulletin A330-52-3087, Revision 02, including Appendix 01, dated February 18, 2016.
- Service Bulletin A340-52-4095, Revision 02, including Appendix 01, dated November 29, 2015.
- Service Bulletin A340-52-5020, Revision 02, including Appendices 01 and 02, dated November 27, 2015.

The following service information describes procedures for modifying the frame fork area at beam 4 and frame head area at beam 1 from frame 20B to frame 25 of the forward cargo door frame. This service information is distinct since it applies to different airplane models and configurations.

- Service Bulletin A330-52-3105, dated February 24, 2016.
- Service Bulletin A330-52-3110, dated February 15, 2016.
- Service Bulletin A330-52-3111, dated February 15, 2016.
- Service Bulletin A340-52-4108, dated February 15, 2016.

- Service Bulletin A340-52-4113, dated February 15, 2016.
- Service Bulletin A340-52-4114, dated February 15, 2016.

The following service information describes procedures for modifying the fastener holes in the forward cargo door frame structure by cold working and changing the fastener type and size. This service information is distinct since it applies to different airplane models and configurations.

- Service Bulletin A330-52-3116, dated April 20, 2016.
- Service Bulletin A330-52-3117, dated April 20, 2016.
- Service Bulletin A330-52-3118, dated April 20, 2016.
- Service Bulletin A340-52-4119, dated April 20, 2016.
- Service Bulletin A340-52-4120, dated April 20, 2016.
- Service Bulletin A340-52-4121, dated April 20, 2016.

The following service information describes procedures for inspecting the frame fork area at beam 4 and frame head area at beam 1 of the aft cargo door from frame 60 to frame 64A, adjusting the hook gaps “U” and “V,” and doing corrective actions. This service information is distinct since it applies to different airplane models and configurations.

- Service Bulletin A330-52-3095, Revision 02, including Appendices 01 and 02, dated February 19, 2016.
- Service Bulletin A340-52-4101, Revision 02, including Appendices 01 and 02, dated November 27, 2015.

- Service Bulletin A340-52-5023, Revision 02, including Appendices 01 and 02, dated November 27, 2015.

The following service information describes procedures for modifying the frame fork and head of the aft cargo door frame from frame 59A to frame 65. This service information is distinct since it applies to different airplane models and configurations.

- Service Bulletin A330-52-3106, dated February 24, 2016.
- Service Bulletin A330-52-3112, dated February 24, 2016.
- Service Bulletin A330-52-3113, dated February 15, 2016.
- Service Bulletin A330-52-3114, dated February 15, 2016.
- Service Bulletin A340-52-4109, dated February 25, 2016.
- Service Bulletin A340-52-4115, dated February 19, 2016.

The following service information describes procedures for modifying the fastener holes in the aft cargo door frame structure by cold working and changing the fastener type and size. This service information is distinct since it applies to different airplane models.

- Service Bulletin A330-52-3115, dated April 20, 2016.
- Service Bulletin A340-52-4118, dated April 20, 2016.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Costs of Compliance**

We estimate that this AD affects 73 airplanes of U.S. registry.

We estimate that it takes up to 888 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost up to \$126,420 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be up to \$14,738,700, or up to \$201,900 per product.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has

delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.



### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive (AD) 2012-12-12, Amendment 39-17092 (77 FR 37797, June 25, 2012); and AD 2013-16-26, Amendment 39-17564 (78 FR 53640, August 30, 2013); and

b. Adding the following new AD:

**2018-02-17 Airbus:** Amendment 39-19170; Docket No. FAA-2017-0713; Product Identifier 2016-NM-199-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD replaces AD 2012-12-12, Amendment 39-17092 (77 FR 37797, June 25, 2012); and AD 2013-16-26, Amendment 39-17564 (78 FR 53640, August 30, 2013).

#### **(c) Applicability**

This AD applies to the Airbus airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certified in any category, all manufacturer serial numbers, except those on which Airbus Modification 202702 and Modification 202790 have been embodied in production; and the Airbus airplanes identified in paragraphs (c)(3) through (c)(5) of this AD, certified in any category, all manufacturer serial numbers.

(1) Model A330-201, -202, -203, -223, -223F, -243, and -243F airplanes.

(2) Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(3) Model A340-211, -212, and -213 airplanes.

(4) Model A340-311, -312, and -313 airplanes.

(5) Model A340-541 and -642 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 52, Doors.

**(e) Reason**

This AD was prompted by reports of cracked forward and aft cargo door frames, and loose, missing, or sheared rivets. We are issuing this AD to detect and correct cracked or ruptured cargo door frames, which could result in reduced structural integrity of the forward or aft cargo door.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Affected Cargo Doors**

For the purpose of this AD, the affected cargo doors are pre-modification 202702 (forward cargo door) and pre-modification 202790 (aft cargo door), and are listed by part number (P/N) in the applicable service information identified in paragraph (h)(1) or (l)(1) of this AD. For post-modification doors, which are not affected by this AD, the P/Ns are identified as F52370900XXX (forward cargo door) and F52372315XXX (aft cargo door), where “XXX” can be a combination of any three numerical digits.

**(h) Forward Cargo Door Repetitive Inspections**

(1) Before exceeding 5,300 total flight cycles since first installation of the forward cargo door on an airplane, or within the applicable compliance time specified in table 1 to

paragraph (h)(1) of this AD, whichever occurs later, except as specified in paragraph (q) of this AD: Do all applicable detailed and high frequency eddy current (HFEC) inspections of all frame fork areas, frame head areas, and outer skin areas of each affected forward cargo door, as applicable; in accordance with the Accomplishment Instructions of the applicable service information specified in paragraph (h)(1)(i), (h)(1)(ii), or (h)(1)(iii) of this AD. Do all applicable related investigative actions and corrective actions before further flight in accordance with the Accomplishment Instructions of the applicable service information specified in paragraph (h)(1)(i), (h)(1)(ii), or (h)(1)(iii) of this AD, except as required by paragraph (p) of this AD. Repeat the applicable inspections of the frame fork areas, frame head areas, and outer skin areas of each affected forward cargo door thereafter at intervals not to exceed 1,400 flight cycles.

**Table 1 to paragraph (h)(1) of this AD – Forward Cargo Door Inspection Compliance Time**

<b>Airplane Condition (on the effective date of this AD)</b>	<b>Compliance Time</b>
Inspected only as specified in Airbus Alert Operator Transmission (AOT) A330-52A3085 or AOT A340-52A4092, as applicable	Within 1,100 flight cycles after the last inspection, but without exceeding 10,600 flight cycles since first installation of the forward cargo door on an airplane
Inspected as specified in Airbus AOT A330-52A3085 and as specified in AOT A330-A52L003-12, and the last inspection was accomplished as specified in AOT A330-A52L003-12	Within 1,100 flight cycles after the last inspection as specified in AOT A330-52A3085

<b>Airplane Condition (on the effective date of this AD)</b>	<b>Compliance Time</b>
Inspected as specified in Airbus AOT A330-52A3085 and as specified in AOT A330-A52L003-12, and the last inspection was accomplished as specified in AOT A330-52A3085	Within 1,100 flight cycles after the last inspection as specified in AOT A330-A52L003-12
Inspected as specified in Airbus AOT A340-52A4092 and as specified in AOT A340-A52L004-12, and the last inspection was accomplished as specified in AOT A340-A52L004-12	Within 1,100 flight cycles after the last inspection as specified in AOT A340-52A4092
Inspected as specified in Airbus AOT A340-52A4092 and as specified in AOT A340-A52L004-12, and the last inspection was accomplished as specified in AOT A340-52A4092	Within 1,100 flight cycles after the last inspection as specified in AOT A340-A52L004-12
Inspected as specified in the original issue of Airbus Service Bulletin (SB) A330-52-3087, or SB A340-52-4095, or SB A340-52-5020, as applicable	There is no compliance time for the initial inspection in paragraph (h)(1) of this AD for these airplanes, provided these airplanes comply with the actions specified paragraph (r)(1) of this AD.
Inspected as specified in Revision 01 of Airbus SB A330-52-3087, or SB A340-52-4095, or SB A340-52-5020, as applicable	There is no compliance time for the initial inspection in paragraph (h)(1) of this AD for these airplanes, provided these airplanes comply with the actions specified in paragraph (r)(2) of this AD.
Inspected as specified in Revision 02 of Airbus SB A330-52-3087, or SB A340-52-4095, or SB A340-52-5020, as applicable	Within 1,400 flight cycles after the last inspection, but without exceeding 5,300 total flight cycles since first installation of the forward cargo door on an airplane
Never inspected	Within 1,100 flight cycles after the effective date of this AD, but without exceeding 6,400 flight cycles since first installation of the forward cargo door on an airplane

(i) Airbus Service Bulletin A330-52-3087, Revision 02, including Appendix 01, dated February 18, 2016 (“SB A330-52-3087, R02”).

(ii) Airbus Service Bulletin A340-52-4095, Revision 02, including Appendix 01, dated November 29, 2015 (“SB A340-52-4095, R02”).

(iii) Airbus Service Bulletin A340-52-5020, Revision 02, including Appendices 01 and 02, dated November 27, 2015 (“SB A340-52-5020, R02”).

(2) Concurrently with the first inspection required by paragraph (h)(1) of this AD: Do a one-time detailed inspection of the hook gaps “U” and “V” of each affected forward cargo door for proper adjustment, and, depending on findings, adjust the hook(s), in accordance with the Accomplishment Instructions of the applicable service information specified in paragraph (h)(2)(i), (h)(2)(ii), or (h)(2)(iii) of this AD. Do all the required hook gap adjustments before further flight.

(i) SB A330-52-3087, R02.

(ii) SB A340-52-4095, R02.

(iii) SB A340-52-5020, R02.

**(i) Forward Cargo Door Modification**

(1) Except as specified in paragraph (i)(2) of this AD, before exceeding 18,500 total flight cycles since first installation of the forward cargo door on an airplane, or within 12 months after the effective date of this AD, whichever occurs later: Do reinforcement modifications on the frame structure of each affected forward cargo door, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (i)(1)(i) through (i)(1)(vi) of this AD, except as required by paragraph (p) of this AD.

(i) Airbus Service Bulletin A330-52-3105, dated February 24, 2016 (for certain Model A330-202, -223, and -243 airplanes; and Model A330-301, -321, -322, -341, and -342 airplanes).

(ii) Airbus Service Bulletin A330-52-3110, dated February 15, 2016 (for certain Model A330-202, -203, -223, and -243 airplanes; and Model A330-303, -323, and -343 airplanes).

(iii) Airbus Service Bulletin A330-52-3111, dated February 15, 2016 (for certain Model A330-202, -203, -223, -223F, -243, and -243F airplanes; and Model A330-302, -303, -323, -342, and -343 airplanes).

(iv) Airbus Service Bulletin A340-52-4108, dated February 15, 2016 (for certain Model A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313 airplanes).

(v) Airbus Service Bulletin A340-52-4113, dated February 15, 2016 (for certain Model A340-312 and -313 airplanes).

(vi) Airbus Service Bulletin A340-52-4114, dated February 15, 2016 (for certain Model A340-313 airplanes).

(2) Accomplishment of the reinforcement modifications required by paragraph (i)(1) of this AD may be deferred, provided that, before exceeding 18,500 total flight cycles since first installation of the forward cargo door on an airplane, or within 12 months after the effective date of this AD, whichever occurs later, but not earlier than 14,500 total flight cycles for Model A330 airplanes, or 12,500 total flight cycles for Model A340 airplanes, cold working is accomplished on the frame structure of each

affected forward cargo door, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (i)(2)(i) through (i)(2)(vi) of this AD, except as required by paragraph (p) of this AD. Modification of an airplane by accomplishment of the cold working specified in this paragraph does not constitute terminating action for the repetitive inspections required by paragraph (h)(1) of this AD.

(i) Airbus Service Bulletin A330-52-3116, dated April 20, 2016 (for certain Model A330-202, -223, and -243 airplanes; and Model A330-301, -321, -322, -341, and -342 airplanes).

(ii) Airbus Service Bulletin A330-52-3117, dated April 20, 2016 (for certain Model A330-202, -203, -223, and -243 airplanes; and Model A330-303, -323, and -343 airplanes).

(iii) Airbus Service Bulletin A330-52-3118, dated April 20, 2016 (for certain Model A330-202, -203, -223, -223F, -243, and -243F airplanes; and Model A330-302, -303, -323, -342, and -343 airplanes).

(iv) Airbus Service Bulletin A340-52-4119, dated April 20, 2016 (for certain Model A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313 airplanes).

(v) Airbus Service Bulletin A340-52-4120, dated April 20, 2016 (for certain Model A340-312 and -313 airplanes).

(vi) Airbus Service Bulletin A340-52-4121, dated April 20, 2016 (for certain Model A340-313 airplanes).

(3) Within 18,500 flight cycles after cold working is accomplished on the frame structure of each affected forward cargo door as specified in paragraph (i)(2) of this AD: Do the reinforcement modifications on the frame structure of each affected forward cargo door, using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(j) Forward Cargo Door Terminating Action**

Modification of an airplane by reinforcement of the forward cargo door frame structure required by paragraph (i)(1) or (i)(3) of this AD constitutes terminating action for the inspections required by paragraph (h)(1) and (h)(2) of this AD for that airplane.

**(k) Definitions of Pre-Modified and Post-Modified Airplanes of Aft Cargo Door**

(1) For the purpose of this AD, pre-modified Model A330-200 series airplanes, Model A330-200 Freighter series airplanes, Model A330-300 series airplanes, Model A340-200 series airplanes, and Model A340-300 series airplanes are defined as those not having Airbus Modification 44852, or Modification 44854 applied in production, or being in pre-Airbus Service Bulletin A330-52-3044 or pre-Airbus Service Bulletin A340-52-4054 configuration, as applicable.

(2) For the purpose of this AD, post-modification Model A330-200 series airplanes, Model A330-200 Freighter series airplanes, Model A330-300 series airplanes, Model A340-200 series airplanes, and Model A340-300 series airplanes are defined as those having Airbus Modification 44852 or Modification 44854 applied in production, or



modified in service as specified in Airbus Service Bulletin A330-52-3044 or Airbus Service Bulletin A340-52-4054, as applicable.

**(l) Aft Cargo Door Repetitive Inspections**

(1) Before exceeding 4,000 total flight cycles for pre-modified airplanes, or 12,000 total flight cycles for post-modified airplanes, since first installation of the aft cargo door on an airplane, as applicable, or within the compliance time specified in table 2 to paragraph (l)(1) of this AD or table 3 to paragraph (l)(1) of this AD, as applicable, whichever occurs later, except as specified in paragraph (q) of this AD: Do all applicable inspections of all frame fork areas, frame head areas, and outer skin area of each affected aft cargo door, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraph (l)(1)(i), (l)(1)(ii), or (l)(1)(iii) of this AD. Do all applicable related investigative actions and corrective actions before further flight in accordance with the Accomplishment Instructions of the applicable service information specified in paragraph (l)(1)(i), (l)(1)(ii), or (l)(1)(iii) of this AD, except as required by paragraph (p) of this AD. Repeat the applicable inspections thereafter at intervals not to exceed 1,400 flight cycles.

**Table 2 to paragraph (l)(1) of this AD – Aft Cargo Door Inspection Compliance Times for Pre-Modified Airplanes**

<b>Airplane Condition (on the effective date of this AD)</b>	<b>Compliance Time</b>
Inspected only as specified in Airbus AOT A330-52A3084, or AOT A340-52A4091, as applicable	Within 550 flight cycles after the last inspection, but without exceeding 15,800 flight cycles since first installation of the aft cargo door on an airplane

<b>Airplane Condition</b> <b>(on the effective date of this AD)</b>	<b>Compliance Time</b>
Inspected as specified in Airbus AOT A330-52A3084 and as specified in AOT A330-A52L001-12, and the last inspection was accomplished as specified in AOT A330-A52L001-12	Within 550 flight cycles after the last inspection as specified in AOT A330-52A3084
Inspected as specified in Airbus AOT A330-52A3084 and as specified in AOT A330-A52L001-12, and the last inspection was accomplished as specified in AOT A330-52A3084	Within 550 flight cycles after the last inspection as specified in AOT A330-A52L001-12
Inspected as specified in Airbus AOT A340-52A4091 and as specified in AOT A340-A52L002-12, and the last inspection was accomplished as specified in AOT A340-A52L002-12	Within 550 flight cycles after the last inspection as specified in AOT A340-52A4091
Inspected as specified in Airbus AOT A340-52A4091 and as specified in AOT A340-A52L002-12, and the last inspection was accomplished as specified in AOT A340-52A4091	Within 550 flight cycles after the last inspection as specified in AOT A340-A52L002-12
Inspected as specified in the original issue of Airbus SB A330-52-3095, or SB A340-52-4101, as applicable	There is no compliance time for the initial inspection in paragraph (l)(1) of this AD for these airplanes, provided these airplanes comply with the actions specified in paragraph (r)(3) of this AD.
Inspected as specified in Revision 01 of Airbus SB A330-52-3095, or SB A340-52-4101, as applicable	There is no compliance time for the initial inspection in paragraph (l)(1) of this AD for these airplanes, provided these airplanes comply with the actions specified in paragraph (r)(4) of this AD.
Inspected as specified in Revision 02 of Airbus SB A330-52-3095, or SB A340-52-4101, as applicable	Within 1,400 flight cycles after the last inspection as specified in Revision 02 of Airbus SB A330-52-3095, or SB A340-52-4101, as applicable but without exceeding 4,000 flight cycles since first installation of the aft cargo door on an airplane, as applicable.

<b>Airplane Condition (on the effective date of this AD)</b>	<b>Compliance Time</b>
Never inspected	Within 550 flight cycles after the effective date of this AD, but without exceeding 4,550 flight cycles since first installation of the aft cargo door on an airplane

**Table 3 to paragraph (l)(1) of this AD – Aft Cargo Door Inspection Compliance Times for Post-Modified Airplanes and Model A340-500 and -600 Airplanes**

<b>Airplane Condition (on the effective date of this AD)</b>	<b>Compliance Time</b>
Never inspected	Within 550 flight cycles after the effective date of this AD, but without exceeding 12,550 flight cycles since first installation of the aft cargo door on an airplane
Inspected as specified in the original issue of Airbus SB A330-52-3095 or SB A340-52-4101, or SB A340-5023, as applicable	There is no compliance time for paragraph (l)(1) of this AD for these airplanes, provided these airplanes comply with the actions specified in paragraph (r)(3) of this AD.
Inspected as specified in Revision 01 of Airbus SB A330-52-3095, or SB A340-52-4101, or SB A340-5023, as applicable	There is no compliance time for paragraph (l)(1) of this AD for these airplanes, provided these airplanes comply with the actions specified in paragraph (r)(4) of this AD.
Inspected as specified in Revision 02 of Airbus SB A330-52-3095, or SB A340-52-4101, or SB A340-5023, as applicable	Within 1,400 flight cycles after the last inspection as specified in Revision 02 of Airbus SB A330-52-3095, or SB A340-52-4101, or SB A340-5023, as applicable, but without exceeding 12,000 flight cycles since first installation of the aft cargo door on an airplane

(i) Airbus Service Bulletin A330-52-3095, Revision 02, including Appendices 01 and 02, dated February 19, 2016 (“SB A330-52-3095, R02”).

(ii) Airbus Service Bulletin A340-52-4101, Revision 02, including Appendices 01 and 02, dated November 27, 2015 (“SB A340-52-4101, R02”).

(iii) Airbus Service Bulletin A340-52-5023, Revision 02, including Appendices 01 and 02, dated November 27, 2015 (“SB A340-52-5023, R02”).

(2) Concurrently with the first inspection required by paragraph (l)(1) of this AD: Do a one-time detailed inspection of the hook gaps “U” and “V” of each affected aft cargo door for proper adjustment and, depending on findings, adjust the hook(s) in accordance with the Accomplishment Instructions of the applicable service information specified in paragraph (l)(2)(i), (l)(2)(ii), or (l)(2)(iii) of this AD. Do all the required hook gap adjustments before further flight.

(i) SB A330-52-3095, R02.

(ii) SB A340-52-4101, R02.

(iii) SB A340-52-5023, R02.

**(m) Modification for Pre-Modified Airplanes**

(1) For pre-modified airplanes, except as specified in paragraph (m)(2) of this AD: Before exceeding 18,500 total flight cycles since first installation of the aft cargo door on an airplane, or within 12 months after the effective date of this AD, whichever occurs later, do reinforcement modifications, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (m)(1)(i) through (m)(1)(vi) of this AD, except as required by paragraph (p) of this AD.

(i) Airbus Service Bulletin A330-52-3106, dated February 24, 2016 (for certain Model A330-301, -321, -322, -341, and -342 airplanes).

(ii) Airbus Service Bulletin A330-52-3112, dated February 24, 2016 (for certain Model A330-202 and -223 airplanes; and Model A330-301, -322, -341, and -342 airplanes).

(iii) Airbus Service Bulletin A330-52-3113, dated February 15, 2016 (for certain Model A330-223 and -243 airplanes; and Model A330-322 and -342 airplanes).

(iv) Airbus Service Bulletin A330-52-3114, dated February 15, 2016 (for certain Model A330-202, -203, -223, -223F, -243, and -243F airplanes; and Model A330-302, -303, -323, -342, and -343 airplanes).

(v) Airbus Service Bulletin A340-52-4109, dated February 25, 2016 (for certain Model A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313 airplanes).

(vi) Airbus Service Bulletin A340-52-4115, dated February 19, 2016 (for certain Model A340-212, -213, and -313 airplanes).

(2) Accomplishment of the reinforcement modifications required by paragraph (m)(1) of this AD may be deferred provided that before exceeding 18,500 total flight cycles since first installation of the aft cargo door on an airplane, or within 12 months after the effective date of this AD, whichever occurs later, but not earlier than 14,500 total flight cycles, cold working is accomplished on the frame structure of each affected aft cargo door, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-52-3115, dated April 20, 2016; or Airbus Service Bulletin A340-52-4118, dated April 20, 2016; as applicable. Modification of an airplane by

accomplishment of the cold working specified in this paragraph does not constitute terminating action for the repetitive inspections required by paragraph (l)(1) of this AD.

(3) For an airplane on which the cold working on the cargo door frame structure is accomplished, as specified in paragraph (m)(2) of this AD: Within 18,500 flight cycles after the application of cold working, do reinforcement modifications, in accordance with the Accomplishment Instructions of the service information specified in paragraphs (m)(1)(i) through (m)(1)(vi) of this AD, as applicable, or using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

**(n) Terminating Action Aft Cargo Doors for Pre-Modified Airplanes**

Modification of an airplane by reinforcement of the aft cargo door frame structure required by paragraph (m)(1) or (m)(3) of this AD constitutes terminating action for the inspections required by paragraph (l)(1) and (l)(2) of this AD for that airplane.

**(o) Optional Terminating Action Modification for Post-Modified Airplanes**

For post-modified airplanes, modification of an airplane by reinforcement of the aft cargo door frame structure, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (m)(1)(i) through (m)(1)(vi) of this AD, or using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus's EASA DOA, constitutes terminating action for the inspections required by paragraph (l)(1) and (l)(2) of this AD for that

airplane. If approved by the DOA, the approval must include the DOA-authorized signature.

**(p) Exceptions to Service Information**

Where the service information specified in paragraphs (h)(1), (i)(1), (i)(2), (l)(1), and (m) of this AD specifies to contact Airbus for instructions or repair, before further flight, accomplish corrective actions in accordance with the procedures specified in paragraph (t)(2) of this AD.

**(q) Exception to Initial Inspection Compliance Time**

For the purposes of table 1 to paragraph (h)(1) of this AD, table 2 to paragraph (l)(1) of this AD, and table 3 to paragraph (l)(1) of this AD: As soon as a cargo door is inspected using any applicable service information specified in this AD, the previous inspections accomplished in accordance with any alert operator transmission can be disregarded for the determination of the compliance time for the initial inspection required by this AD.

**(r) Exception to Reporting in the Service Information**

Although the Airbus service bulletins specified in paragraphs (r)(1) through (r)(6) of this AD specify to submit certain information to the manufacturer, and specify that action as “RC” (Required for Compliance), this AD does not include that requirement.

(1) SB A330-52-3087, R02.

(2) SB A330-52-3095, R02.

(3) SB A340-52-4095, R02.

(4) SB A340-52-4101, R02.

(5) SB A340-52-5020, R02.

(6) SB A340-52-5023, R02.

**(s) Credit for Previous Actions**

(1) This paragraph provides credit for the initial inspection required by paragraph (h) of this AD, if that inspection was performed before the effective date of this AD using Airbus Service Bulletin A330-52-3087, dated August 29, 2013; Airbus Service Bulletin A340-52-4095, dated August 29, 2013; or Airbus Service Bulletin A340-52-5020, dated August 29, 2013; as applicable; provided that the actions identified as “additional work” in the Accomplishment Instructions of Airbus Service Bulletin A330-52-3087, Revision 01, dated July 9, 2014; Airbus Service Bulletin A340-52-4095, Revision 01, dated July 28, 2014; or Airbus Service Bulletin A340-52-5020, Revision 01, dated July 9, 2014; as applicable; are accomplished within 1,100 flight cycles after that inspection; and provided the next inspection of all frame fork areas, frame head areas, and outer skin area of each affected forward cargo door is accomplished within 1,100 flight cycles after that inspection, in accordance with the Accomplishment Instructions of SB A330-52-3087, R02; SB A340-52-4095, R02; or SB A340-52-5020, R02, as applicable.

(2) This paragraph provides credit for the initial inspection required by paragraph (h) of this AD, if that inspection was performed before the effective date of this AD using Airbus Service Bulletin A330-52-3087, Revision 01, dated July 9, 2014; Airbus Service Bulletin A340-52-4095, Revision 01, dated July 28, 2014; or Airbus Service Bulletin A340-52-5020, Revision 01, dated July 9, 2014; as applicable; provided



that the next inspection of all frame fork areas, frame head areas, and outer skin area of each affected forward cargo door, is accomplished within 1,100 flight cycles after that inspection in accordance with the Accomplishment Instructions of SB A330-52-3087, R02; SB A340-52-4095, R02; or SB A340-52-5020, R02, as applicable.

(3) This paragraph provides credit for the initial inspection required by paragraph (l) of this AD, if that inspection was performed before the effective date of this AD using Airbus Service Bulletin A330-52-3095, dated August 29, 2013; Airbus Service Bulletin A340-52-4101, dated August 29, 2013; or Airbus Service Bulletin A340-52-5023, dated August 29, 2013; provided that the actions identified as “additional work” in the Accomplishment Instructions of Airbus Service Bulletin A330-52-3095, Revision 01, dated July 28, 2014; Airbus Service Bulletin A340-52-4101, Revision 01, dated July 28, 2014; or Airbus Service Bulletin A340-52-5023, Revision 01, dated July 28, 2014; as applicable; are accomplished within 550 flight cycles after that inspection, and provided the next inspection of all frame fork areas, frame head areas, and outer skin area of each affected aft cargo door is accomplished within 550 flight cycles after that inspection in accordance with the Accomplishment Instructions of SB A330-52-3095, R02; SB A340-52-4101, R02; or SB A340-52-5023, R02, as applicable.

(4) This paragraph provides credit for the initial inspection required by paragraph (l) of this AD, if that inspection was performed before the effective date of this AD using Airbus Service Bulletin A330-52-3095, Revision 01, dated July 28, 2014; Airbus Service Bulletin A340-52-4101, Revision 01, dated July 28, 2014; or Airbus Service Bulletin A340-52-5023, Revision 01, dated July 28, 2014; as applicable;

provided that the next inspection of all frame fork areas, frame head areas, and outer skin area of each affected aft cargo door is accomplished within 550 flight cycles after that inspection in accordance with the Accomplishment Instructions of SB A330-52-3095, R02; SB A340-52-4101, R02; or SB A340-52-5023, R02, as applicable.

(5) Where Airbus Service Bulletins A330-52-3095, Revision 01, dated July 28, 2014; A340-52-4101, Revision 01, dated July 28, 2014; A340-52-5020, Revision 01, dated July 9, 2014; and A340-52-5023, Revision 01, dated July 28, 2014; refers to using fasteners having P/N ASNA2657, this AD also allows the use of alternative HST11 series fasteners.

**(t) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (u)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(2) Contacting the Manufacturer:** As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

**(3) Required for Compliance (RC):** Except as required by paragraph (p) of this AD: If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(u) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2016-0188, dated September 21, 2016; corrected September 22, 2016, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0713.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (v)(4) and (v)(5) of this AD.

**(v) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Airbus Service Bulletin A330-52-3087, Revision 02, including Appendix 01, dated February 18, 2016.

(ii) Airbus Service Bulletin A330-52-3095, Revision 02, including Appendices 01 and 02, dated February 19, 2016.

(iii) Airbus Service Bulletin A330-52-3105, dated February 15, 2016.

(iv) Airbus Service Bulletin A330-52-3106, dated February 24, 2016.

(v) Airbus Service Bulletin A330-52-3110, dated February 15, 2016.

(vi) Airbus Service Bulletin A330-52-3111, dated February 15, 2016.

(vii) Airbus Service Bulletin A330-52-3112, dated February 24, 2016.

(viii) Airbus Service Bulletin A330-52-3113, dated February 15, 2016.

(ix) Airbus Service Bulletin A330-52-3114, dated February 15, 2016.

(x) Airbus Service Bulletin A330-52-3115, dated April 20, 2016.

(xi) Airbus Service Bulletin A330-52-3116, dated April 20, 2016.

(xii) Airbus Service Bulletin A330-52-3117, dated April 20, 2016.

- (xiii) Airbus Service Bulletin A330-52-3118, dated April 20, 2016.
- (xiv) Airbus Service Bulletin A340-52-4095, Revision 02, including Appendix 01, dated November 27, 2015.
- (xv) Airbus Service Bulletin A340-52-4101, Revision 02, including Appendices 01 and 02, dated November 27, 2015.
- (xvi) Airbus Service Bulletin A340-52-4108, dated February 15, 2016.
- (xvii) Airbus Service Bulletin A340-52-4109, dated February 25, 2016.
- (xviii) Airbus Service Bulletin A340-52-4113, dated February 15, 2016.
- (xix) Airbus Service Bulletin A340-52-4114, dated February 15, 2016.
- (xx) Airbus Service Bulletin A340-52-4115, dated February 19, 2016.
- (xxi) Airbus Service Bulletin A340-52-4118, dated April 20, 2016.
- (xxii) Airbus Service Bulletin A340-52-4119, dated April 20, 2016.
- (xxiii) Airbus Service Bulletin A340-52-4120, dated April 20, 2016.
- (xxiv) Airbus Service Bulletin A340-52-4121, dated April 20, 2016.
- (xxv) Airbus Service Bulletin A340-52-5020, Revision 02, including Appendices 01 and 02, dated November 27, 2015.
- (xxvi) Airbus Service Bulletin A340-52-5023, Revision 02, including Appendices 01 and 02, dated November 27, 2015.
- (3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 45 80; email: [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet: <http://www.airbus.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on January 11, 2018.

John P. Piccola, Jr.,  
Acting Director,  
System Oversight Division,  
Aircraft Certification Service.

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